

ABSTRACT OF THE DISCLOSURE

In a piezoelectric element having a piezoelectric film sandwiched between a lower electrode and an upper electrode, the lower electrode and/or the upper electrode and the piezoelectric film
5 comprise perovskite oxide and a contact interface between the lower electrode and/or the upper electrode and the piezoelectric film does not exist and a region where crystals of the lower electrode
10 and/or the upper electrode and crystals of the piezoelectric film are mixed exists between the lower electrode and/or the upper electrode and the piezoelectric film.